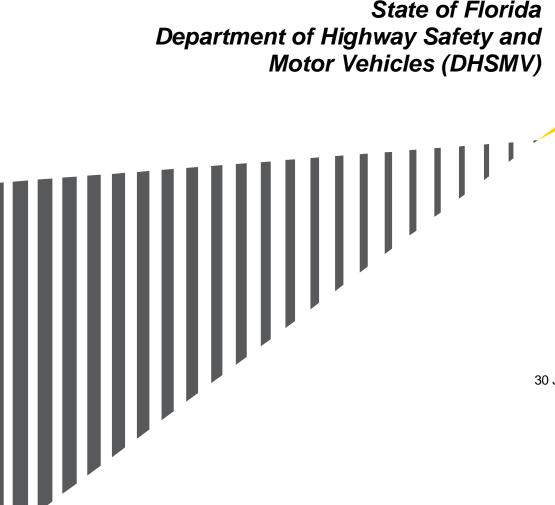
Monthly Assessment Report

Independent Validation and Verification (IV&V) Project

> **Motorist Modernization Program** (Phase I)

State of Florida Department of Highway Safety and Motor Vehicles (DHSMV)



30 July 2015





Ernst & Young LLP 118 N. Gadsden Street Tallahassee, FL 32301 United States Tel: +1 850-222-1199 www.ey.com

Monthly Assessment Report for Motorist Modernization Program (Phase I) IV&V Project

Kim Chojnowski Department of Highway Safety and Motor Vehicles 2900 Apalachee Parkway, MS# 11 Tallahassee. FL 32399-0500

We have completed our Monthly Assessment Report for the Motorist Modernization Program (Phase I) Independent Verification and Validation effort. The Monthly Assessment Report was prepared in accordance with the following, and our procedures were limited to those documents:

- DHSMV RFQ 019-15 dated 12 December 2014
- Attachment I Scope of Services dated 02 February 2015
- EY Proposal to Serve dated 16 January 2015

We value the opportunity to work with you and sincerely appreciate the cooperation and assistance your team provided to us during the preparation of this Monthly Assessment Report. We would be pleased to discuss any aspect of our Monthly Assessment Report with you or other members of management at your convenience.

This is intended solely for the information and use of the management of the Department of Highway Safety and Motor Vehicles (Department) for the State of Florida and is not intended to be and should not be used by anyone other than these specified parties. Ernst & Young therefore assumes no responsibility to any user of the report other than Department. Any other persons who choose to rely on our report do so entirely at their own risk.

Sincerely,

30 July 2015

Ernst + Young LLP

Document Control

This is a controlled document. The control and release of this document is the responsibility of the document owner.

Issue control							
Document reference		IVV-302AE P		Project	Motorist Modernization Program (Phase I)		
Issue 2.0		Date	30 July 2015		Author	Gary E. Didio	
Document title		DHSMV IVV-302AD Monthly Assessment Report					
	Revision history						
Issue	e Date		Author Com		Commen	Comment	
1.0	15 July	2015 G. Didio)	Initial release for review		
2.0	30 July) July 2015 G. Didio)	Final approved release		

We have reviewed and agreed to the information described in this document and referenced attachments.

Approval						
Name	Title	Date	Signature			
Kim Chojnowski	IV&V Contract Manager					
Terrence Samuel	Director Office of Motorist Modernization					

	Abstract
Background	In order to gain an understanding of the risks associated with the State of Florida Department of Highway Safety and Motor Vehicles (DHSMV) Motorist Modernization (MM) Program (Phase I), Ernst & Young (EY) conducts independent verification and validation (IV&V) reviews to identify key challenges and associated recommendations for DHSMV management to consider for addressing the challenges.
Results	As a result of conducting the Monthly Assessment, we have identified the below challenges with the MM Program (Phase I) that are impacting the Program and its ability to successfully achieve its objectives. 1. There are not enough resources assigned to the Program to implement foundational elements, as well as to complete required activities. 2. The design of the program governance structure and associated decision framework is insufficient to manage the project. 3. The project management procedures are not complete and do not include all procedures necessary to manage the project. 4. Program schedule is not complete. 5. A project performance management methodology has not been implemented. 6. Quality and acceptance management processes are insufficient. 7. The business case to justify the Program is incomplete. 8. The requirements engineering and design methodology is not complete 9. A detailed organizational change management plan has not been created.
Implications	 The above challenges, if not corrected, will adversely affect the MM Program. Implications of these challenges are as follows: Inability to manage the Program. Inability to complete the Program in accordance with scope, schedule, budget and quality requirements. Inability to deliver a desirable solution that represents the anticipated outcome for the business units. Inability to effectively control the project and determine true situational awareness. Reduces visibility into actual project performance. Masks true situational awareness, thereby negatively impacting project decisions. Resources required for achieving project objectives are not estimated properly, leading to cost overruns, delayed timelines, and inadequate quality. Late stage surprises of unforeseen requirements that impact program objectives. Increases the risk of the organization not accepting or being able to use the new system. Intended benefits not realized to the extent expected. Negative impacts to application functionality, business processes, internal controls, transaction processing, and reporting.
Recommendations	Within the body of the Monthly Assessment Report, there are numerous recommendations for correcting the identified challenges, which will decrease the risk of the MM Program (Phase I) of not achieving the planned benefits and anticipated outcomes. The MM Program Team has developed a management action with specific activities defined to implement the recommendations associated with each IV&V deficiency.

Table of Contents

1 Exe	ecutiv	e summary	1
1.1	Key	indicators	5
1.2	Ove	rall strengths	6
1.3	Key	deficiencies and actions	7
1.4	Key	deficiency recommendations	10
2 Int	roduc	tion	11
2.1	Pur	oose	11
2.2	Refe	erences	11
2.3	Doc	ument organization	12
3 Fir	ndings	and recommendations	13
3.1	Nev	v deficiencies	13
3.2	Pro	cess improvement recommendations	14
4 De	ficien	cies, recommendations and responses	15
4.1	Оре	en deficiencies	15
4.2	Clos	sed deficiencies	35
Append	lix A.	Acronyms and abbreviations	36
Append	lix B.	IV&V assessment	38
Append	lix C.	Project milestones	39
C.1	Late	e tasks	41
C.2	Fore	ecast completion	42
Append	lix D.	Project budget	43
D.1	Proj	ect funding	44
D.2	Staf	f funding	45
D.3	Ехр	ense funding	46
D.4	Har	dware funding	47
D.5	Oth	er funding	48
D.6	IV&	V services funding	49
Append		Maturity assessment results	
E.1	Mat	turity scorecard – program governance	50
E.2	Mat	turity scorecard – project management	51
E.3	Mat	turity scorecard – technical solution	52
E.4	Mat	turity scorecard – maturity level definitions	53

Appendix F. Project schedule analysis results	55
F.1 Schedule analysis	
F.2 Schedule analysis descriptions and risks	56
F.3 Performance analysis	
Appendix G. Interviews and artifacts	
G.1 Interviews	62
G.2 Artifacts	63
Appendix H. Meeting minutes and status reports	64
H.1 Meetings	64
H.2 Status reports	
List of Figures	
List of Figures	
Figure 1. Overall risk state and trending	3
Figure 2. Summary of IV&V cube facet ratings and open deficiencies per month	4
Figure 3. Status of deficiency recommendations	10
Figure 4. Number of late tasks per reporting period	41
Figure 5. Forecast milestone slippage	42
Figure 6. Total project budget versus actual expenditures	44
Figure 7. Total staff budget versus actual expenditures	45
Figure 8. Total expense budget versus actual expenditures	46
Figure 9. Total hardware budget versus actual expenditures	47
Figure 10. Total other costs budget versus actual expenditures	48
Figure 11. Total IV&V services budget versus actual expenditures	49
Figure 12. Maturity scorecard for program governance areas	50
Figure 13. Maturity scorecard for project management areas	
	51
Figure 14. Maturity scorecard for technical solution areas	

Figure 16. Project performance summary61

List of Tables

Table 1. Summary of changes	1
Table 2. Key indicators	5
Table 3. Key deficiencies and actions	7
Table 4. Summary of findings, implications, deficiencies and recommendations	13
Table 5. Process improvement recommendations	14
Table 6. Summary of open deficiencies, recommendations and responses	15
Table 7. Summary of closed deficiencies, recommendations and responses	35
Table 8. Acronyms and abbreviations	36
Table 9. IV&V assessment areas	38
Table 10. Project milestones	39
Table 11. Maturity level definitions	53
Table 12. Project schedule analysis results – schedule 1	55
Table 13. Project schedule analysis results – legend	56
Table 14. Schedule analysis descriptions and risks	56
Table 15. Performance report analysis results	59
Table 16. Interviews conducted	62
Table 17. Project artifacts	63
Table 18. Summary of meetings	64
Table 19. Summary of status reports	65

1 Executive summary

This report is an assessment of the strengths, risk exposure and key issues that are associated with the State of Florida Department of Highway Safety and Motor Vehicles (DHSMV or Department) Motorist Modernization (MM) Program (Phase I). The following table identifies changes since the submission of the previous report.

Table 1. Summary of changes				
Item	Description			
General	 The MM Program Team is working to address the deficiencies identified by the IV&V Team. A management action plan has been developed with specific activities defined to implement the recommendations associated with each IV&V deficiency. Specific IV&V comments associated with each deficiency and corresponding action plan have been entered by the IV&V Team into the management action plan. The IV&V Team agrees with the approach to implement each recommendation. Some items will need to be evaluated as part of the monthly assessment process. The Program is slightly behind schedule based on individual task status data. 34 of 1,371 total tasks (2.5%) contained in the project schedule are late. 0 of 138 tasks (0.0%) for the current period are late. Because the MM Program Team has not begun reporting EVM metrics, the amount of time the project is behind schedule cannot be determined. No additional facets evaluated. No new deficiencies identified since the last report. Overall IV&V risk state for the project is Amber (issues and inefficiencies). Data contained in this MAR is as of 14 July 2015. 			
Deficiencies addressed	 Specific items associated with each deficiency have been addressed. Refer to Section 4, Deficiencies, recommendations and responses. 			
New deficiencies	No new deficiencies identified.Refer to Section 3, Findings and recommendations.			
Risk ratings	No risk rating changes.Refer to Section 4, Deficiencies, recommendations and responses.			
Maturity ratings	 G4 – Decision framework changed from Level 2 (repeatable) to Level 3 (defined). Refer to Appendix E, Maturity assessment results. 			
Interviews conducted	 No interviews conducted. Refer to Appendix G, Interviews and artifacts. 			

Table 1. Summary of changes				
ltem	Description			
Artifacts received	 Artifacts received include the various deliverables, decision escalation framework, draft Executive Steering Committee (ESC) charter, ESC meeting agenda, IV&V deficiency action plan, meeting minutes, schedule, status reports and spending plan. Refer to Appendix G, Interviews and artifacts. 			

The following figure shows the overall risk ratings assigned to each area within the program governance, project management and technical solution dimensions. It also shows the risk state trending for each area (positive or negative). Red facets represent the highest risks and should be remediated first.

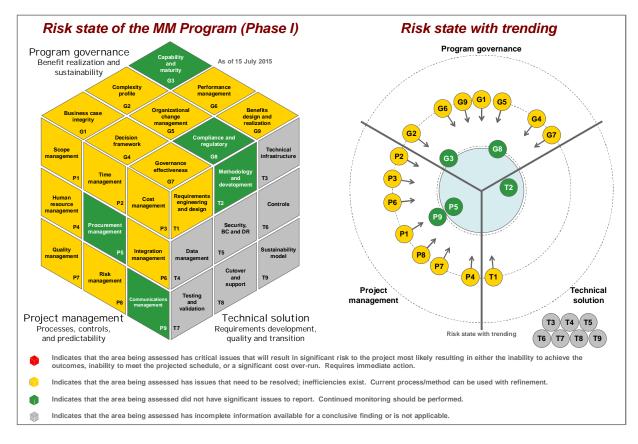


Figure 1. Overall risk state and trending

The following figure shows a summary of the IV&V cube facet ratings (red, amber green and gray) including open deficiencies per month for the past several months.

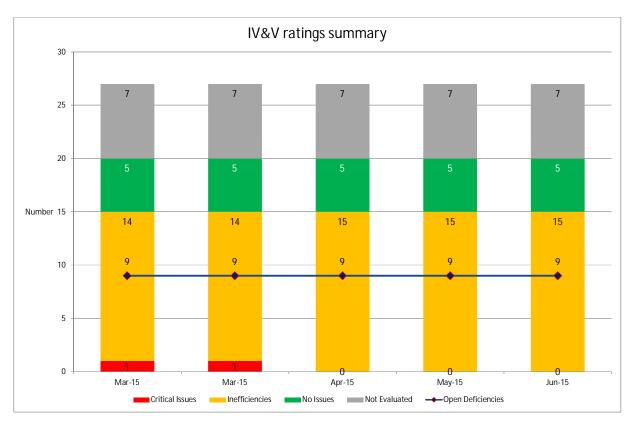


Figure 2. Summary of IV&V cube facet ratings and open deficiencies per month

Key items displayed in the above figure are as follows:

- The MM Program Team is actively working to address the deficiencies identified by the IV&V Team.
- The overall IV&V project risks are decreasing.

1.1 Key indicators

The following table lists the key indicators for the MM Program (Phase I) for the monthly reporting period.

Table 2. Key indicators				
Indicator	Value	Comment		
Is the project approach sound?	Yes	 The overall project approach is based on industry leading practices, methodologies and tools that have been used for other DHSMV projects. Refer to Section 4, Deficiencies, recommendations and responses. 		
Is the project on time?	No	 The Program is slightly behind schedule based on individual task status data. 34 of 1,371 total tasks (2.5%) contained in the project schedule are late. 0 of 138 tasks (0.0%) for the current period are late. Because the MM Program Team has not begun reporting EVM metrics, the amount of time the project is behind schedule cannot be determined. Refer to Appendix C, Project milestones and Appendix F, Project schedule analysis results. 		
Is the project on budget?	Yes	 The Program is currently on budget based on provided budget and spending information. Refer to Appendix D, Project budget. 		
Is scope being managed so there is no scope creep?	Yes	 The work being completed as part of the MM Program (Phase I) is within the scope of the project as defined in the Schedule IV-B Feasibility Study. A change management plan which defines the procedures to be followed to manage changes to the defined Program scope has been established for the Program. Refer to Section 4, Deficiencies, recommendations and responses. 		
What are the project's future risks?	Unknown	 The MM Program Team is actively working to address the deficiencies identified by the IV&V Team. A management action plan has been developed with specific activities defined to implement the recommendations associated with each IV&V deficiency. Refer to Section 4, Deficiencies, recommendations and responses. 		

Table 2. Key indicators				
Indicator Value		Comment		
Are the project's risks increasing or decreasing?	Decreasing	 The MM Program Team is actively working to address the deficiencies identified by the IV&V Team. 		
		 A management action plan has been developed with specific activities defined to implement the recommendations associated with each IV&V deficiency. 		
		 Refer to Section 4, Deficiencies, recommendations and responses. 		
Are there new or emerging technological solutions that will	No	 New and emerging technologies were considered in the Feasibility Study. 		
affect the project's technology assumptions?		 None have an adverse effect on the project's technological assumptions. 		

1.2 Overall strengths

The following is a list of the strengths identified for the MM Program (Phase I):

- MM Program (Phase I) is using established State procedures including the development of a Schedule IV-B Feasibility Study to initiate and manage the project.
- Program leadership is involved weekly in a status meeting and is making the project a priority.
- Project team is co-located enabling collaboration and enhanced visibility.
- Project team is committed to the success of the program and has dedicated extra hours to meet project schedule commitments.
- Team members communicate frequently and listen well to each other.
- The team is currently using the Blueprint tool to collect, manage and trace requirements.
- A Sketching tool is being used in the requirement gathering process to enable consistent mockups.

1.3 Key deficiencies and actions

The following table provides a summary of the key deficiencies impacting the MM Program (Phase I) such that it has an increased risk of not achieving the planned benefits and anticipated outcomes. It also identifies the actions taken by the Department to address the identified deficiencies. A complete list of recommendations associated with each identified deficiency and actions taken by the Department is contained in Section 4, Deficiencies, recommendations and responses.

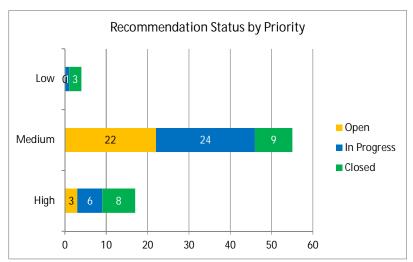
Table 3. Key deficiencies and actions					
Implications	Actions taken				
D1 – Insufficient program resources					
 Inability to manage the Program. Inability to complete the Program in accordance with scope, schedule, budget and quality requirements. 	 DHSMV has assigned two (2) additional individuals to the Program Team, one based on IV&V recommendations. Personnel requisitions have been established for additional roles based on IV&V recommendations. DHSMV is in the process of conducting interviews for additional MM Program personnel. DHSMV is currently revising the MM Program Management Plan to implement the recommendations associated with this deficiency. 				
D2 – Insufficient program governance design					
 Limited capacity to facilitate timely decision making and forecast typical challenges (risks and issues) that could face the program. Inability to deliver a desirable solution that represents the anticipated outcome for the business units. Misalignment in project operational decisions to the intended project objectives. Inconsistent decision awareness. 	 DHSMV is updating the program governance and decision escalation framework in response to recommendations provided by IV&V. DHSMV is currently revising the MM Program Management Plan to implement the recommendations associated with this deficiency. A draft charter for the ESC has been developed and is in the process of being reviewed. The IV&V Team is currently researching appropriate score cards to measure governance effectiveness. 				

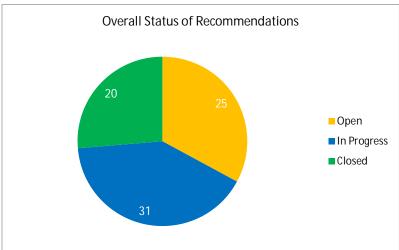
Table 3. Key deficiencies and	actions
Implications	Actions taken
D3 – Insufficient project management disciplines	
 Increased risk of cost overrun, schedule slippage and lessened quality. Inability to effectively control the project and determine true situational awareness. Inability to deliver a desirable solution that represents the anticipated outcome for the business units. 	DHSMV is currently revising the MM Program Management Plan to implement the recommendations associated with this deficiency.
D4 – Program schedule is not complete	
 Reduces visibility into actual project performance. Masks true situational awareness, thereby negatively impacting project decisions. Unable to establish true visibility and determine forecasting capability in achieving project expectations. Reduces predictability into cost and schedule performance, and achievement of planned outcomes. Leads to inaccurate forecasts for milestone completion. Limits early and fact based decision making by project stakeholders. Over-allocation leads to personnel burn-out, loss in productivity and results in turnover. Resources required for achieving project objectives are not estimated properly, leading to cost overruns, delayed timelines, and inadequate quality. 	 DHSMV has revised the Program schedule in response to recommendations provided by IV&V. DHSMV is currently revising the MM Program Management Plan to implement the recommendations associated with this deficiency.
D5 – Performance management methodology has not been	implemented
 Reduces management's visibility into actual project performance. Masks true situational awareness, thereby negatively impacting project decisions. Unable to establish true visibility and determine forecasting capability in achieving project expectations. Reduces predictability into cost and schedule performance, as well as achievement of planned outcomes. Leads to inaccurate projected end date of future milestones. Limits early and fact based decision making by project stakeholders. 	DHSMV is working to revise and implement the recommendations provided by IV&V for the overall program.

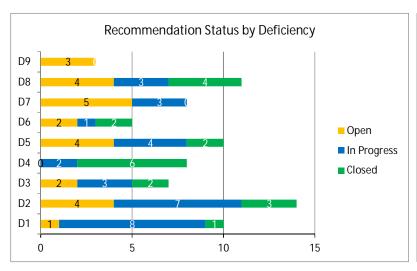
Table 3. Key deficiencies and actions			
Implications	Actions taken		
D6 - Insufficient quality and acceptance management			
 Late stage surprises of unforeseen requirements that impact program objectives. Increases to project scope, budget, or schedule due to 	DHSMV is currently revising the MM Program Management Plan to implement the recommendations		
deliverable rework. Increased development efforts.	associated with this deficiency.		
 Negative impacts to application functionality, business processes, internal controls, transaction processing, and reporting. 			
D7 – Incomplete business case			
 Intended benefits not realized to the extent expected. Project stakeholders and executives are unaware of the potential true cost of the project leading to unexpected funding requests. 	 DHSMV is working to revise and implement the recommendations provided by IV&V for the overall program. 		
D8 – Requirements engineering and design methodology is	s not complete		
Late stage surprises of unforeseen requirements that impact program objectives.	DHSMV is currently revising the MM Program Management Plan to		
Increases to project scope, budget, and schedule.Increased development efforts.	implement the recommendations associated with this deficiency.		
 Negative impacts to application functionality, business processes, internal controls, transaction processing, and reporting. 			
D9 – Detailed OCM plan has not been created			
 Increases the risk of the organization not accepting or being able to use the new system. 	DHSMV is working to revise and implement the recommendations		
 Leads to the use of other non-standard processes and workarounds, ineffective use of business processes, delayed implementation of changes, and an overall reduction in benefits realization. 	provided by IV&V for the overall program.		
 Inability to deliver a solution that represents the anticipated outcome for the business units. 			

1.4 Key deficiency recommendations

The following charts show the status of the recommendations associated with each IV&V deficiency.







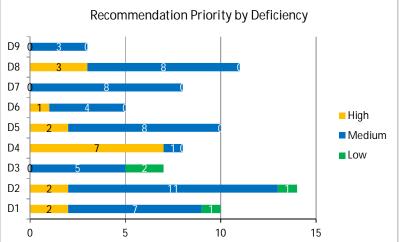


Figure 3. Status of deficiency recommendations

2 Introduction

The Florida Department of Highway Safety and Motor Vehicles (DHSMV or Department) intends to reengineer all of its motorist services systems in order to better serve and support its customers. To ensure success in this endeavor, a multi-year phased plan will better mitigate risks, prevent system downtime, and provide improved functionality over time. The Department has organized the Motorist Modernization (MM) Program into a staged, multi-phased re-engineering and re-development effort that prioritizes and schedules the planned work over multiple years.

2.1 Purpose

The purpose of this monthly assessment report (MAR) is to provide the Department with a summary of findings regarding the MM Program (Phase I) based on the analysis of project artifacts and the performance of monitoring activities. The monthly assessment includes an assessment of the project status, identifying strengths, deficiencies and recommendations for correcting the deficiencies.

2.2 References

The MAR was prepared in accordance with the following, and our procedures were limited to those documents:

- DHSMV RFQ 019-15 dated 12 December 2014
- Attachment I Scope of Services dated 02 February 2015
- EY Proposal to Serve dated 16 January 2015
- Purchase Order No. P0758329

2.3 Document organization

The IV&V MAR is organized as follows:

- Executive summary Describes the major project characteristics, risks, findings, and the
 actions taken for addressing deficiencies.
- Introduction A brief overview of the MM Program and this MAR.
- **Findings and recommendations** Contains the findings, appropriate deficiencies, and associated suggestions including alternative approaches or solutions for correcting all identified project deficiencies. Also includes any process improvement recommendations.
- Deficiencies, recommendations and responses Used to track closed and open deficiencies along with the associated recommendations for each deficiency and responses from both the Department and IV&V Team.
- Acronyms and abbreviations List of acronyms and abbreviations, along with their full description, used throughout this document.
- IV&V assessment Contains the results of analyses conducted for additional areas of the IV&V framework as a result of ongoing monitoring activities.
- Project milestones List of the project milestones as of the final publication of this report indicating completion date.
- **Project budget** Contains several charts that show budget and actual amounts for each month of the project.
- Maturity assessment results Contains the results of conducting a maturity assessment of the MM Program (Phase I).
- **Project schedule analysis results** Contains the results of conducting an analysis of all project schedules provided in support of the assessment.
- Interviewees and artifacts Contains lists of personnel interviewed and artifacts used as part of the assessment.
- **Meeting minutes and status reports** Contains a summary of the meetings conducted and status reports submitted during the monthly reporting period.

3 Findings and recommendations

This section is used to identify any new deficiencies as a result of ongoing IV&V activities, as well as process improvement recommendations.

3.1 New deficiencies

The following table provides a summary of the key findings, both positive and negative, implications, appropriate deficiencies to be addressed, and recommendations for correcting as a result of conducting the monthly assessment.

	Table 4. Summary of findings, implications, deficiencies and recommendations					
No.	No. Areas Deficiency and implications Key findings Recommendations					
	No new deficiencies identified since the last report.					

3.2 Process improvement recommendations

The following table identifies specific process improvement recommendations as a result of ongoing IV&V reviews.

	Table 5. Process improvement recommendations					
No.	Recommendation	Opened	Progress update / resolution	Status		
004	Implement a formal naming and number convention for all deliverables as follows:	05/06/2015 Project Team has implemented a standar naming and number convention for all	',	Closed		
	 Deliverable names should be standard: 					
	 Deliverable XXX – [short title] vY.Z – 2015MMDD 					
	 Deliverable comment spreadsheets should follow the exact same naming convention and have the same version number as the document that is being submitted 					
	 All documents that comprise a single deliverable being submitted should be incorporated into a zip file, if possible 					

4 Deficiencies, recommendations and responses

This section is used to track closed and open deficiencies along with the associated recommendations for each deficiency and responses from both the Department and IV&V Team.

4.1 Open deficiencies

The following table lists the open deficiencies.

Table 6. Summary of open deficiencies, recommendations and responses			
Areas and implications	Recommendations	Comments	Status
D1 – Insufficient program reso	ources		
 Areas: P4 – HR management Implications: Inability to manage the Program. Inability to complete the Program in accordance with scope, schedule, budget and quality requirements. 	 Develop and implement a complete HR management plan in accordance with the PMI PMBOK® Guide – Fifth Edition. Revise the PMP to include the HR management methodology. Use the HR management methodology to manage and control project resources. Develop a staffing management plan to identify, acquire, and manage all resources needed for the MM Program. Identify critical DHSMV resources and implement an appropriate retention or replacement plan. Revise the RAM to include specific roles and responsibilities for each project management procedure. Expand the existing Program organization structure to include the following additional roles and 	 IV&V (BAR – March 2015) Deficiency opened. DHSMV (BAR – March 2015) DHSMV is actively working to implement the recommendations presented in this report for the overall program. To date, a Deputy Program Director has been hired and starts 5/1/2015, and the subsequent recommended positions will be advertised and filled in the next few weeks. IV&V (MAR – March 2015) No updates received. DHSMV (MAR – March 2015) DHSMV is actively working to implement the recommendations presented in this report for the overall program. To date, a Deputy Program Director has been hired and starts 5/1/2015, 	 Open The following recommendations have been addressed: 7.a 10

Table	e 6. Summary of open deficiencies	s, recommendations and responses	
Areas and implications	Recommendations	Comments	Status
9.	responsibilities: a. Deputy Program Director b. Budget and Contract Coordinator c. Communication Coordinator d. Program Administrative Assistant Communicate and clarify the HR management methodology and plan once established. Define and communicate HR management roles and responsibilities to the project team. Keep track of all resource related risks in the risk register and define appropriate mitigation actions, owners and due dates.	and the subsequent recommended positions will be advertised and filled in the next few weeks. IV&V (MAR – April 2015) DHSMV has assigned two (2) additional individuals to the Program Team, one based on IV&V recommendations. Personnel requisitions are in the process of being established for additional roles based on IV&V recommendations. The risk rating of P4 (HR management) is changed from Red (critical issues) to Amber (issues and inefficiencies). DHSMV (MAR – April 2015) DHSMV concurs with the IV&V April response and has no additional information to provide. IV&V (MAR – May 2015) DHSMV has implemented a management action plan with specific activities defined to implement the recommendations associated with this deficiency. The IV&V Team agrees with the approach to implement each recommendation. Some items will need to be evaluated as part of the monthly assessment process.	

Table 6. Summary of open deficiencies, recommendations and responses			
Areas and implications	Recommendations	Comments	Status
		 Recommendations 7.a and 10 have been addressed. 	
		• DHSMV (MAR – May 2015)	
		 DHSMV is in the process of conducting interviews for additional MM Program personnel. 	
		 IV&V (MAR – June 2015) 	
		 DHSMV has provided a draft of the revised PMP for review including a new organizational structure. 	
		 IV&V provided detailed comments for consideration. 	
		 The new organizational structure includes the additional positions recommended by IV&V. 	
		DHSMV (MAR – June 2015)	
		 DHSMV concurs with the IV&V June response and has no additional information to provide. 	
D2 – Insufficient program gove	ernance design		
Areas:	Refine the existing MM Program	• IV&V (BAR – March 2015)	• Open
 G4 – Decision 	governance structure to highlight the decision making role of the ESC and	 Deficiency opened. 	The following
framework	the support role of the PMO.	DHSMV (BAR – March 2015)	recommendations have been
 G7 – Governance effectiveness 	Define and establish an explicit (non-	 DHSMV is updating the program 	addressed:
Implications:	ambiguous) decision framework that	governance and decision escalation framework in response to	• 2
 Limited capacity to 	includes specific drivers, accountability, decision rights and	recommendations presented in this	• 5
facilitate timely decision	performance criteria for each tier in	report.	• 8
making and forecast typical challenges (risks	the governance structure.	 Updates will be formally documented in all project 	

Table 6. Summary of open deficiencies, recommendations and responses			
Areas and implications	Recommendations	Comments	Status
face the program. Inability to deliver a desirable solution that represents the anticipated outcome for the business units. Misalignment in project operational decisions to the intended project objectives. Inconsistent decision awareness. Inconsistent decision awareness. Align a proceed govern the decision awareness. Revision by DL Iss a. Revision a. Revision by DL Iss a. Revision awareness.	e, communicate, and clarify onsibilities, accountabilities, and prities for each level of MM ram governance. e and establish an explicit ion escalation framework for the ct which clearly identifies how ions are escalated through the us tiers of the governance ture. e a formal decision framework peen fully defined, revise the to include the decision	management document artifacts and communicated as recommended to the program team and stakeholders. IV&V (MAR – March 2015) No updates received. DHSMV (MAR – March 2015) DHSMV is updating the program governance and decision escalation framework in response to recommendations presented in this report. Updates will be formally documented in all project management document artifacts and communicated as recommended to the program team and stakeholders. IV&V (MAR – April 2015) The DL Issuance PMP was approved on 30 April 2015 and addressed items per IV&V deliverable comments. The support services PMP is in the process of being revised to address IV&V comments. DHSMV (MAR – April 2015) DHSMV concurs with the IV&V April response and has no additional information to provide. IV&V (MAR – May 2015) DHSMV has implemented a	

Table 6. Summary of open deficiencies, recommendations and responses			
Areas and implications	Recommendations	Comments	Status
	framework once established. 10. Continue to communicate and enforce governance roles and responsibilities to the project team. 11. Complete the definition of the ESC and Advisory Board including a regular cadence for meetings. 12. Ensure that all appropriate ESC and Advisory Board members, delegates, and other requested resources attend all project meetings and are involved in all project decisions when necessary. 13. Define an approach to measure governance effectiveness. 14. Update and present the governance effectiveness scorecard at each ESC meeting.	management action plan with specific activities defined to implement the recommendations associated with this deficiency. The IV&V Team agrees with the approach to implement each recommendation. Some items will need to be evaluated as part of the monthly assessment process. A draft charter for the Advisory Board has been provided for review. The IV&V Team is currently researching appropriate score cards to measure governance effectiveness. Recommendation 8 has been addressed. DHSMV (MAR – May 2015) DHSMV concurs with the IV&V May response and has no additional information to provide. IV&V (MAR – June 2015) DHSMV has provided draft of the following documents for review: Revised PMP. Decision escalation framework. ESC charter. IV&V provided detailed comments for consideration.	

	Table 6. Summary of open deficiencie	es, recommendations and responses	
Areas and implications	Recommendations	Comments	Status
		 been addressed. DHSMV (MAR – June 2015) DHSMV concurs with the IV&V June response and has no additional information to provide. 	
Areas: G2 – Complexity profile P1 – Scope management P2 – Time management P3 – Cost management P4 – HR management P6 – Integration management P7 – Quality management P8 – Risk management Implications: Increased risk of cost overrun, schedule slippage and lessened quality. Inability to effectively control the project and determine true situational awareness.	1. Develop and implement the following project management procedures: a. Time management methodology in accordance with the PMI PMBOK® Guide – Fifth Edition, to establish, manage and control the project schedule. b. Cost management methodology in accordance with the PMI PMBOK® Guide – Fifth Edition, for the collection, management and reporting of cost performance data including the publication of cost performance information to the governance tiers. c. HR management plan in accordance with the PMI PMBOK® Guide – Fifth Edition to manage and control project resources. d. QM plan to measure and monitor project deliverable quality. e. Risk management plan to	 IV&V (BAR – March 2015) Deficiency opened. DHSMV (BAR – March 2015) DHSMV is actively working with the Support Services vendor for contracted project management deliverables. DHSMV is also working to revise and implement the recommendations presented in this report for the overall program. IV&V (MAR – March 2015) No updates received. DHSMV (MAR – March 2015) DHSMV is actively working with the Support Services vendor for contracted project management deliverables. DHSMV is also working to revise and implement the recommendations presented in this report for the overall program. IV&V (MAR – April 2015) 	Open The following recommendations have been addressed: 1.d 1.e 6 7
		report for the overall program. IV&V (MAR – April 2015) The DL Issuance PMP was	

	Table 6. Summary of open deficiencie	s, recommendations and responses	
Areas and implications	Recommendations	Comments	Status
represents the anticipated outcome for the business units.	mitigate the negative impact and maximize the positive impact of risks (opportunities) throughout the lifecycle of the Program. 2. Revise the PMP to include the above project management procedures. 3. Once established, communicate and clarify the PMP and all related roles and responsibilities to team members including contractors. 4. Use the above project management procedures to support the measurement, monitoring and reporting of project status and overall situational awareness. 5. Define and establish a CCRB, including operational procedures, decision authorities and thresholds. 6. Continue to use Daptiv to enter and manage all identified risks and issues, and report all risks and issues in weekly and monthly status reports, as appropriate. a. Include all identified Program risks and issues in Daptiv for management and reporting 7. The risks identified as a result of conducting a risk assessment using the State's IT project risk assessment tool should be transferred to the project risk register and managed for the program.	approved on 30 April 2015 and addressed items per IV&V deliverable comments. The support services PMP is in the process of being revised to address IV&V comments. A revised PMP for the MM Program has not been provided for review. DHSMV (MAR – April 2015) DHSMV is working to revise the MM Phase I Program PMP, but otherwise concurs with the IV&V April response. IV&V (MAR – May 2015) DHSMV has implemented a management action plan with specific activities defined to implement the recommendations associated with this deficiency. The IV&V Team agrees with the approach to implement each recommendation. Some items will need to be evaluated as part of the monthly assessment process. Recommendations 1.d, 1.e, 6 and 7 have been addressed. DHSMV (MAR – May 2015) DHSMV concurs with the IV&V May response and has no additional information to provide.	

Table 6. Summary of open deficiencies, recommendations and responses			
Areas and implications	Recommendations	Comments	Status
		 IV&V (MAR – June 2015) DHSMV has provided a draft of the revised PMP for review. IV&V provided detailed comments for consideration. DHSMV (MAR – June 2015) DHSMV concurs with the IV&V June response and has no additional information to provide. 	
D4 - Program schedule is not	complete		
 Areas: P2 – Time management Implications: Reduces visibility into actual project performance. Masks true situational awareness, thereby negatively impacting project decisions. Unable to establish true visibility and determine forecasting capability in achieving project expectations. Reduces predictability into cost and schedule performance, and achievement of planned outcomes. 	 Develop an IMS that can be used as the basis for managing the MM Program. Structure the IMS using the project schedule guidelines contained in the PMI PMBOK® Guide – Fifth Edition, including manageable task durations, critical path identification and rolling wave planning. Develop a WBS that includes all deliverables, milestones, and associated activities required to complete the entire project.	 IV&V (BAR – March 2015) Deficiency opened. DHSMV (BAR – March 2015) DHSMV is actively working with the Support Services vendor for contracted project management deliverables. DHSMV is also working to revise and implement the recommendations presented in this report for the overall program. IV&V (MAR – March 2015) No updates received. DHSMV (MAR – March 2015) DHSMV is actively working with the Support Services vendor for contracted project management deliverables. DHSMV is also working to revise and implement the 	Open Recommendations 1 through 6 have been addressed.

Table 6. Summary of open deficiencies, recommendations and responses			
Areas and implications	Recommendations	Comments	Status
 Leads to inaccurate forecasts for milestone completion. Limits early and fact based decision making by project stakeholders. Over-allocation leads to personnel burn-out, loss in productivity and results in turnover. Resources required for achieving project objectives are not estimated properly, leading to cost overruns, delayed timelines, and inadequate quality. 	 requirements accordingly. Properly load all resources into the project schedule, assign appropriate resources to activities, and level the schedule so that no resource is overallocated. Incorporate gateways at appropriate points in the project lifecycle with defined entrance and exit criteria for each gateway and appropriate stakeholder approvals. Implement schedule logic so every activity has appropriate predecessors and successors and all activity constraints removed so all activities are completed ASAP. Once the project schedule is complete, formally establish a PMB to use to measure project performance. Use a formal change control process to implement changes in the schedule and re-establish a baseline once approved changes have been incorporated into the schedule. 	recommendations presented in this report for the overall program. IV&V (MAR – April 2015) A new draft MM Program schedule was provided for review. The Program schedule is an IMS that includes the DL Issuance project, support services and IV&V services. Key milestone dates have not been established. A baseline has not been established for the Program schedule. Refer to Section F.1, Schedule analysis for the results of the analysis conducted on the Program schedule. DHSMV (MAR – April 2015) DHSMV is working to baseline the program schedule and will provide this to IV&V for the May report. IV&V (MAR – May 2015) DHSMV has implemented a management action plan with specific activities defined to implement the recommendations associated with this deficiency. The IV&V Team agrees with the approach to implement each recommendation. Some items will need to be evaluated as part of the monthly	

Table 6. Summary of open deficiencies, recommendations and responses			
Areas and implications	Recommendations	Comments	Status
D5 – Performance managemen	nt methodology has not been impleme	 assessment process. Although a PMB has been established, it is not stable and has been changing as a result of changes to the project schedule. Recommendations 1 through 6 have been addressed. DHSMV (MAR – May 2015) DHSMV concurs with the IV&V May response and has no additional information to provide. IV&V (MAR – June 2015) DHSMV has provided a draft of the revised PMP for review. IV&V provided detailed comments for consideration. DHSMV (MAR – June 2015) DHSMV (MAR – June 2015) DHSMV concurs with the IV&V June response and has no additional information to provide. 	
 Areas: G6 – Performance management P2 – Time management Implications: Reduces management's visibility into actual project performance. 	Develop and implement a performance management methodology to measure and monitor project performance. a. Align the performance management methodology with AST requirements. Use the performance management methodology to measure, monitor	 IV&V (BAR – March 2015) Deficiency opened. DHSMV (BAR – March 2015) DHSMV is working to revise and implement the recommendations presented in this report for the overall program. IV&V (MAR – March 2015) 	 Open The following recommendations have been addressed: 9 10

	Table 6. Summary of open deficiencie	s, recommendations and responses	
Areas and implications	Recommendations	Comments	Status
 Masks true situational awareness, thereby negatively impacting project decisions. Unable to establish true visibility and determine forecasting capability in achieving project expectations. Reduces predictability into cost and schedule performance, as well as achievement of planned outcomes. Leads to inaccurate projected end date of future milestones. Limits early and fact based decision making by project stakeholders. 	 and report project status and overall situational awareness. 3. Enhance the existing Daptiv project dashboard to capture and report EVM performance metrics for the MM Program and individual projects. 4. Investigate the expansion of the existing Daptiv project dashboard to include Agile-specific metrics and measures, as well as linkages to detailed Agile status reports. 5. Revise the project schedule so that all tasks contain baseline information. 6. Establish a PMB using the revised project schedule. 7. Incorporate project performance metrics and measures into Program and project status reports. 8. Communicate and clarify the performance management methodology once established. 9. Revise the project schedule to allow adequate time for deliverable review and approval. 10. Consolidate all due dates for all deliverables in a single view to enable better planning for heavy submission weeks and adjust plans accordingly. 	 No updates received. DHSMV (MAR – March 2015) DHSMV is working to revise and implement the recommendations presented in this report for the overall program. IV&V (MAR – April 2015) No updates received. DHSMV (MAR – April 2015) DHSMV is working to baseline the program schedule and will provide this to IV&V for the May report. Performance reporting will initially focus on the schedule since the Support Services engagement is fixed price. However, DHSMV will be exploring other ways to measure and communicate program performance, per IV&V recommendations. IV&V (MAR – May 2015) DHSMV has implemented a management action plan with specific activities defined to implement the recommendations associated with this deficiency. The IV&V Team agrees with the approach to implement each recommendation. Some items will need to be evaluated as part of the monthly 	

Table 6. Summary of open deficiencies, recommendations and responses			
Areas and implications	Recommendations	Comments	Status
		 assessment process. Although a PMB has been established, it is not stable and has been changing as a result of changes to the project schedule. Recommendations 9 and 10 have been addressed. DHSMV (MAR – May 2015) DHSMV will be working to obtain agreement on the PMB and associated schedule management procedures. IV&V (MAR – June 2015) No updates received. DHSMV is working to use the baseline schedule to begin measuring performance. 	
D6 - Insufficient quality and ad	cceptance management		
 Areas: P7 – Quality management Implications: Late stage surprises of unforeseen requirements that impact program objectives. Increases to project scope, budget, or schedule due to 	 Develop and implement a QM plan for the MM Program to measure and monitor project deliverable quality. Incorporate QM activities, milestones, deliverables, and associated resources into the IMS. Continue to develop DEDs for each major deliverable associated with the MM Program. Use the QM plan to measure, monitor and report project deliverable quality. 	 IV&V (BAR – March 2015) Deficiency opened. DHSMV (MAR – March 2015) DHSMV is working to revise and implement the recommendations presented in this report for the overall program. IV&V (MAR – March 2015) No updates received. DHSMV (MAR – March 2015) 	 Open The following recommendations have been addressed: 3

Table 6. Summary of open deficiencies, recommendations and responses			
Areas and implications	Recommendations	Comments	Status
deliverable rework. Increased development efforts. Negative impacts to		 DHSMV is working to revise and implement the recommendations presented in this report for the overall program. 	
application functionality,		• IV&V (MAR – April 2015)	
business processes, internal controls, transaction processing, and reporting.		 The revised PMPs for the DL Issuance project and support services includes a quality management plan which defines processes, metrics and measures for the following: 	
		 Deliverable quality 	
		 Process quality 	
		 System quality 	
		 A draft quality assurance (QA) summary report was provided for review. 	
		 The report identifies the metrics and measures to be used to manage and report quality results for deliverables, processes, systems, scope and contract. 	
		 The deliverable quality metrics and measures are related to process (number of submitted deliverables, duration of deliverable review process, and deliverable approvals). 	
		 There are no quality metrics or measures defined for deliverable content. 	
		DHSMV (MAR – April 2015)	
		 DHSMV is working to provide the 	

Table 6. Summary of open deficiencies, recommendations and responses			
Areas and implications	Recommendations	Comments	Status
		Support Services vendor with measurable and specific content for the Deliverable Expectations Documents going forward.	
		 Otherwise, DHSMV concurs with the IV&V April response. 	
		• IV&V (MAR – May 2015)	
		 DHSMV has implemented a management action plan with specific activities defined to implement the recommendations associated with this deficiency. 	
		 The IV&V Team agrees with the approach to implement each recommendation. 	
		 Although recommendation 1 is a duplicate of D3, #1d, it is part of developing a sound quality management approach for the Program and should therefore remain open complete. 	
		 Recommendation 3 has been addressed. 	
		• DHSMV (MAR – May 2015)	
		 DHSMV concurs with the IV&V May response and has no additional information to provide. 	
		• IV&V (MAR – June 2015)	
		 DHSMV has provided a draft of the revised PMP for review. 	
		 IV&V provided detailed comments for consideration. 	

Table 6. Summary of open deficiencies, recommendations and responses				
Areas and implications	Recommendations	Comments	Status	
D7 Incomplete business see		 DHSMV (MAR – June 2015) DHSMV concurs with the IV&V June response and has no additional information to provide. 		
 Areas: G1 – Business case integrity G9 – Benefits design and realization Implications: Intended benefits not realized to the extent expected. Project stakeholders and executives are unaware of the potential true cost of the project leading to unexpected funding requests. 	 Implement the benefits realization management process as identified in the feasibility study. Implement a separate benefit tracking work stream, managed by the PMO, for tracking and reporting benefits on a recurring (monthly) basis. Include benefits realization tracking as part of the ESC status reports. Revise the benefits realization table contained in the PMP to include all benefits defined in the Schedule IV-B. Revise the CBA analysis and associated forms contained in the Schedule IV-B to include all missing information. Revise the RAM (RASCI) to include specific responsibilities for benefit realization activities and deliverables. Revise the IMS to include specific activities, deliverables, and milestones to manage, monitor, and control project benefits. Once established, conduct routine 	 IV&V (BAR – March 2015) Deficiency opened. DHSMV (BAR – March 2015) DHSMV is working to revise and implement the recommendations presented in this report for the overall program. IV&V (MAR – March 2015) No updates received. DHSMV (MAR – March 2015) DHSMV is working to revise and implement the recommendations presented in this report for the overall program. IV&V (MAR – April 2015) No updates received. DHSMV (MAR – April 2015) DHSMV will be revising the Schedule IV-B business case and related supporting documentation for FY 2016-17. DHSMV is also actively working to update the ROI for the CBA; estimated submission date of 15 	• Open	

Table 6. Summary of open deficiencies, recommendations and responses				
Areas and implications	Recommendations	Comments	Status	
	execution of the benefits tracking process including confirmation of program priorities and the identification of remedial actions if required.	October 2015. NV&V (MAR – May 2015) DHSMV has implemented a management action plan with specific activities defined to implement the recommendations associated with this deficiency. The IV&V Team agrees with the approach to implement each recommendation. DHSMV (MAR – May 2015) DHSMV concurs with the IV&V May response and has no additional information to provide. IV&V (MAR – June 2015) No updates received. DHSMV (MAR – June 2015) Schedule IV-B updates have initiated.		
D8 – Requirements engineerin	g and design methodology is not com	plete	I	
 Areas: T1 – Requirements engineering and design Implications: Late stage surprises of unforeseen requirements that impact program objectives. Increases to project scope, budget, and 	 Develop and implement a requirements engineering and design methodology for the MM Program. Revise the PMP to include the requirements engineering and design methodology. Continue to develop a consistent template to collect requirements and load into Blueprint. Develop Blueprint operational or user 	 IV&V (BAR – March 2015) Deficiency opened. DHSMV (BAR – March 2015) DHSMV is working to revise and implement the recommendations presented in this report for the overall program. IV&V (MAR – March 2015) No updates received. 	 Open The following recommendations have been addressed: 3 5 6 8 	

Table 6. Summary of open deficiencies, recommendations and responses			
Areas and implications	Recommendations	Comments	Status
schedule. Increased development efforts. Negative impacts to application functionality, business processes, internal controls, transaction processing, and reporting.	documentation that defines nomenclature, operational procedures, roles and responsibilities, etc., for the management and administration of the Blueprint configuration being used to support the MM Program. 5. Continue current efforts to standardize the requirement collection and documentation approach. 6. Review requirement categorizations (e.g., deferred, not planned, etc.) and update the comments or explanations supporting those decisions before approval of requirements deliverables. 7. Formally define the approach for user story prioritization and definitions for prioritization values so consistent prioritization can be applied. 8. Include external and internal interface requirements in Blueprint. 9. Ensure requirements validation is formally completed and approved by key stakeholders prior to the implementation phase. 10. Implement a formal quality and review process for approval of user stories prior to promotion to "ready" status. 11. Establish a formal baseline for system requirements once approved	 DHSMV (MAR – March 2015) DHSMV is working to revise and implement the recommendations presented in this report for the overall program. IV&V (MAR – April 2015) The IV&V Team has provided several recommendations and comments to improve the requirements engineering and design methodology within the comment sheets for the following deliverables: 9a, b and c – Legacy system documentation 15 – To-be synchronization process No further updates received. DHSMV (MAR – April 2015) DHSMV incorporated IV&V comments in the deliverables mentioned. The senior business analysts are also working to incorporate the recommended improvements in accordance with IV&V's BAR. IV&V (MAR – May 2015) DHSMV has implemented a management action plan with specific activities defined to implement the recommendations associated with this deficiency. 	

Table 6. Summary of open deficiencies, recommendations and responses			
Areas and implications	Recommendations	Comments	Status
	so changes can be tracked and managed using the change control process.	 The IV&V Team agrees with the approach to implement each recommendation. 	
		 Recommendations 3, 5, 6 and 8 have been addressed. 	
		 DHSMV (MAR – May 2015) 	
		 DHSMV concurs with the IV&V May response and has no additional information to provide. 	
		• IV&V (MAR – June 2015)	
		 DHSMV has provided a draft of the revised PMP for review. 	
		 IV&V provided detailed comments for consideration. 	
		DHSMV (MAR – June 2015)	
		 DHSMV concurs with the IV&V June response and has no additional information to provide. 	
D9 - Detailed OCM plan has no	ot been created		
Areas:G5 – OCMImplications:	Develop, approve, and communicate an OCM plan for the MM Phase I program before the execution phase	 IV&V (BAR – March 2015) Deficiency opened. DHSMV (BAR – March 2015) 	• Open
 Increases the risk of the organization not accepting or being able to use the new system. 	starts. 2. Coordinate the completion of the OCM plan with impacted internal and external stakeholders. 3. Revise the project schedule to include OCM activities.	 DHSMV is working to revise and implement the recommendations presented in this report for the overall program. 	
 Leads to the use of other non-standard processes and workarounds, ineffective use of 		 IV&V (MAR – March 2015) No updates received. DHSMV (MAR – March 2015) 	

Та	Table 6. Summary of open deficiencies, recommendations and responses				
Areas and implications	Recommendations	Comments	Status		
business processes, delayed implementation of changes, and an overall reduction in benefits realization.		 DHSMV is working to revise and implement the recommendations presented in this report for the overall program. IV&V (MAR – April 2015) 			
 Inability to deliver a 		No updates received.			
solution that represents		DHSMV (MAR – April 2015)			
the anticipated outcome for the business units.		DHSMV concurs with the IV&V April response and has no additional information to provide.			
		 IV&V (MAR – May 2015) 			
		 DHSMV has implemented a management action plan with specific activities defined to implement the recommendations associated with this deficiency. 			
		 The IV&V Team agrees with the approach to implement each recommendation. 			
		DHSMV (MAR – May 2015)			
		 DHSMV concurs with the IV&V May response and has no additional information to provide. 			
		• IV&V (MAR – June 2015)			
		 No updates received. 			
		DHSMV (MAR – June 2015)			
		 DHSMV has consulted with its Support Services vendor on a Change Management approach. 			
		 Proposed deliverables and associated cost estimates are 			

Table 6. Summary of open deficiencies, recommendations and responses				
Areas and implications	Recommendations	Comments	Status	
		pending as part of the contract amendment for FY 2015-16, at which time DHSMV leadership will assess whether to proceed with these as part of the Program or in the broader context of the overall Department strategic objectives		

4.2 Closed deficiencies

The following table lists the deficiencies that have been closed.

	Table 7. Summary of closed deficiencies, recommendations and responses				
No.	Deficiency and implications	Department and IV&V comments	Status		
	No deficiencies closed since the last report.				

Appendix A. Acronyms and abbreviations

Acronyms and abbreviations are defined the first time they are used in this document. The entire acronym/abbreviation is listed first, and then the acronym/abbreviation is enclosed in parentheses. The consolidated list of acronyms and abbreviations is listed below.

	Table 8. Acronyms and abbreviations		
Acronym / Abbreviation	Description		
AC	Actual Cost		
ASAP	As Soon as Possible		
AST	Agency for State Technology		
BAC	Budget at Completion		
BAR	Baseline Assessment Report		
ВС	Business Continuity		
СВА	Cost Benefit Analysis		
CCRB	Change Control Review Board		
CPI	Cost Performance Index		
CV	Cost Variance		
DED	Deliverable Expectation Document		
DHSMV	Department of Highway Safety and Motor Vehicles		
DL	Driver License		
DR	Disaster Recovery		
EAC	Estimate at Completion		
ES	Earned Schedule		
ESC	Executive Steering Committee		
ETC	Estimate to Complete		
EV	Eamed Value		
EVM	Eamed Value Management		
EY	Ernst & Young		
HR	Human Resource		
IMS	Integrated Master Schedule		
IV&V	Independent Verification and Validation		

	Table 8. Acronyms and abbreviations
Acronym / Abbreviation	Description
LOE	Level of Effort
MAR	Monthly Assessment Report
MM	Motorist Modemization
ОСМ	Organizational Change Management
ОММ	Office of Motorist Modernization
РМВ	Performance Measurement Baseline
РМВОК	Project Management Body of Knowledge
PMI	Project Management Institute
РМО	Project Management Office
PMP	Project Management Plan
PV	Planned Value
QM	Quality Management
RAM	Responsibility Assignment Matrix
RASCI	Responsible, Accountable, Support, Consulted, Informed
RFQ	Request for Quotation
SPI	Schedule Performance Index
SV	Schedule Variance
TCPI	To Complete Performance Index
WBS	Work Breakdown Structure

Appendix B. IV&V assessment

This section contains the results of analyses conducted for additional areas of the IV&V framework as a result of ongoing monitoring activities. These areas may include one or more from the below table based on the project lifecycle and availability of program and project documentation.

Table 9. IV&V assessment areas				
Program governance	Project management	Technical solution		
 G1 – Business case integrity G2 – Complexity profile G3 – Capability and maturity G4 – Decision framework G5 – Organizational change management (OCM) G6 – Performance management G7 – Governance effectiveness G8 – Compliance and regulatory G9 – Benefits design and realization 	 P1 – Scope management P2 – Time management P3 – Cost management P4 – Human resource (HR) management P5 – Procurement management P6 – Integration management P7 – Quality management P8 – Risk management P9 – Communications management 	 T1 – Requirements engineering and design T2 – Methodology and development T3 – technical infrastructure T4 – Data management T5 – Security, business continuity (BC) and disaster recovery (DR) T6 – Controls T7 – Testing and validation T8 – Cutover and support T9 – Sustainability model 		

Each assessment area is comprised of a set of expectations that are organized within the following categories:

- Methodology and approach Expectations for the area methodology and approach.
- Templates and tools Any templates and tools used to support the methodology and approach.
- Work products Actual work products produced.
- Communication and coordination How the methodology and approach are communicated and coordinated with appropriate Program personnel.
- Execute, monitor and control Expectations for the execution, monitoring and control of the methodology and approach used.

There were no new areas evaluated since the last report.

Appendix C. Project milestones

The following is a list of the project milestones as of the final publication of this report indicating completion date. The dates contained in the below table were derived from the following:

- Original completion date Baseline project schedule
- Scheduled completion date Baseline project schedule
- Planned completion date Project status report.
- Projected Project performance report.
- Actual completion date Project status report.

	Table 10. Project milestones					
WBS	Title	Completion date				
WDS	i itie	Original	Scheduled	Planned	Forecast	Actual
1.1.10	Project Initiation Phase COMPLETE	05/06/2015	05/06/2015	05/06/2015	n/a	05/06/2015
1.2.7	Project Planning Phase COMPLETE	05/29/2015	05/29/2015	05/29/2015	n/a	05/29/2015
1.3.10	Project Monitoring and Control Phase COMPLETE	06/28/2019	06/28/2019	06/28/2019	n/a	
1.4.8	Project Closeout Phase COMPLETE	06/28/2019	06/28/2019	06/28/2019	n/a	
3.8	Requirements Gathering and Documentation COMPLETE	06/25/2015	06/25/2015	06/25/2015	n/a	
4.9	Requirements Validation and Approval COMPLETE	03/02/2016	03/02/2016	03/02/2016	n/a	
5.2	Database Redesign / Synchronization COMPLETE	05/01/2018	05/01/2018	05/01/2018	n/a	
5.3.7	Development COMPLETE	05/25/2018	05/25/2018	05/25/2018	n/a	
5.4.2.8	Obtain Enterprise System Testing Product Owner/Business Approval and Signoff	02/07/2019	02/07/2019	02/07/2019	n/a	
5.4.2.9	Obtain Enterprise System Testing ISA/Technical Approval and Signoff	02/07/2019	02/07/2019	02/07/2019	n/a	
5.4.3.4	Obtain Security Scan ISM Approval and Signoff	02/20/2019	02/20/2019	02/20/2019	n/a	
5.4.4	Testing COMPLETE	02/20/2019	02/20/2019	02/20/2019	n/a	

	Table 10. Project milestones					
WBS Title	Completion date					
	i itie	Original	Scheduled	Planned	Forecast	Actual
5.5.3	Operations Planning COMPLETE	03/02/2018	03/02/2018	03/02/2018	n/a	
5.6.4	Implementation COMPLETE	06/27/2019	06/27/2019	06/27/2019	n/a	
5.7	Project COMPLETE	06/28/2019	06/28/2019	06/28/2019	n/a	

Notes:

- Based on project schedule: MM Phase I MASTER Program Schedule v21.mpp
- Items highlighted are projected to be late.
- Original Original contract completion date.
- Scheduled Scheduled completion date based on the latest schedule baseline.
- Planned Planned completion date (should be the same as scheduled).
- Forecast Based on the current schedule performance index.
- Actual The actual completion date.

C.1 Late tasks

The following figure shows the number of tasks that are late for each of the IV&V reports for both total tasks late and tasks that are open (task completion percentage is greater than 0% and less than 100%). A task is automatically designated as "late" if it is not complete and the project status date is later than the baseline finish date for the task.

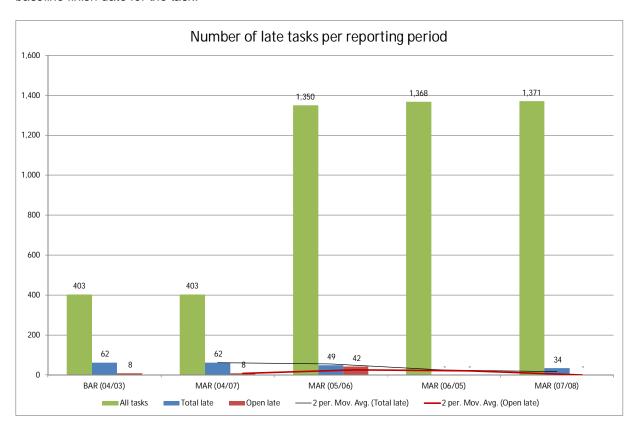


Figure 4. Number of late tasks per reporting period

Key items displayed in the above figure are as follows:

• The total number of tasks designated as late is 2.5% of the total number of tasks.

C.2 Forecast completion

The forecast calculation is based on the Earned Schedule (ES) concept which provides the ability to predict project completion dates and is the bridge for performing meaningful schedule analysis from EVM data. It uses the time based measures while integrating both EVM and the integrated schedule analysis.

The following figure shows the forecast slippage of each project milestone using the performance forecast contained in the project performance report as reported in the published MARs.

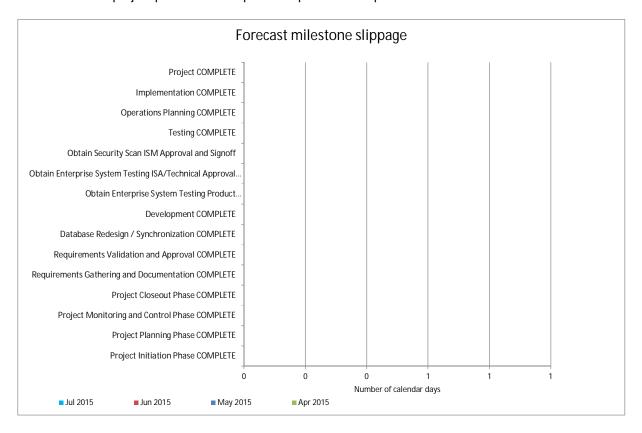


Figure 5. Forecast milestone slippage

Key items displayed in the above figure are as follows:

The MM Program Team has not begun reporting EVM metrics.

Appendix D. Project budget

This section contains several charts that show budget and actual amounts for each month of the project. The data used to generate these charts was derived from the MM Program (Phase I) Spending Plan. Each chart includes the following information:

- Budget budget amount for each month.
- Actual actual expenditures for each month.
- Cumulative budget sum of all monthly budget amounts.
- Cumulative actual sum of all monthly actual amounts.

D.1 Project funding

The chart below shows the total funding for the MM Program (Phase I), including budget and actual expenditures.

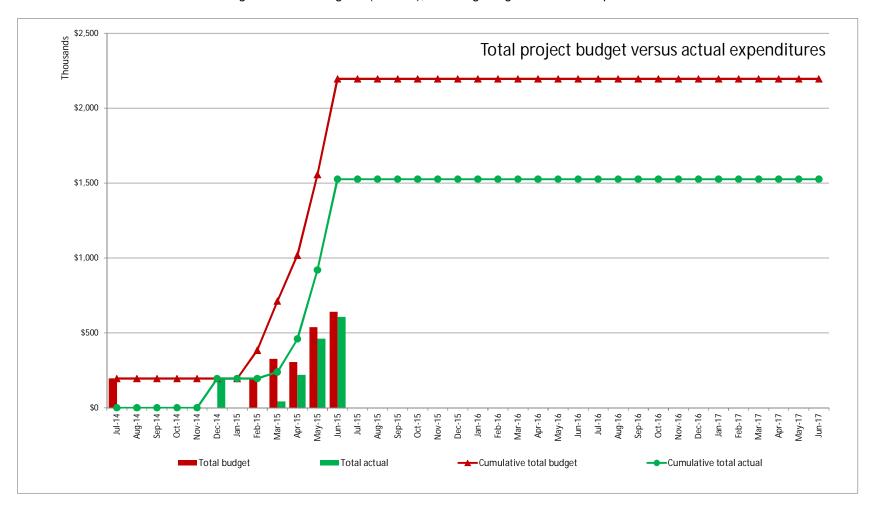


Figure 6. Total project budget versus actual expenditures

D.2 Staff funding

The chart below shows the staff funding including State, operations and contractors for the MM Program (Phase I).

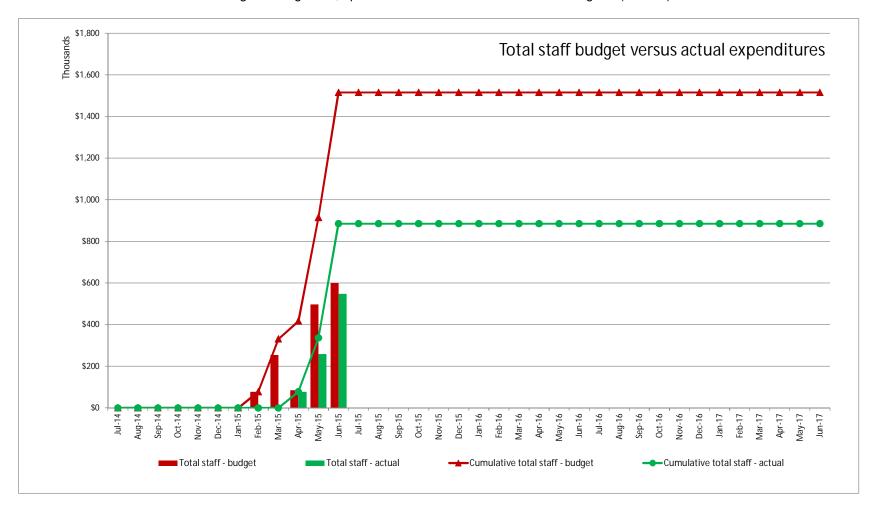


Figure 7. Total staff budget versus actual expenditures

D.3 Expense funding

The chart below shows the expense funding including travel, training and software for the MM Program (Phase I).

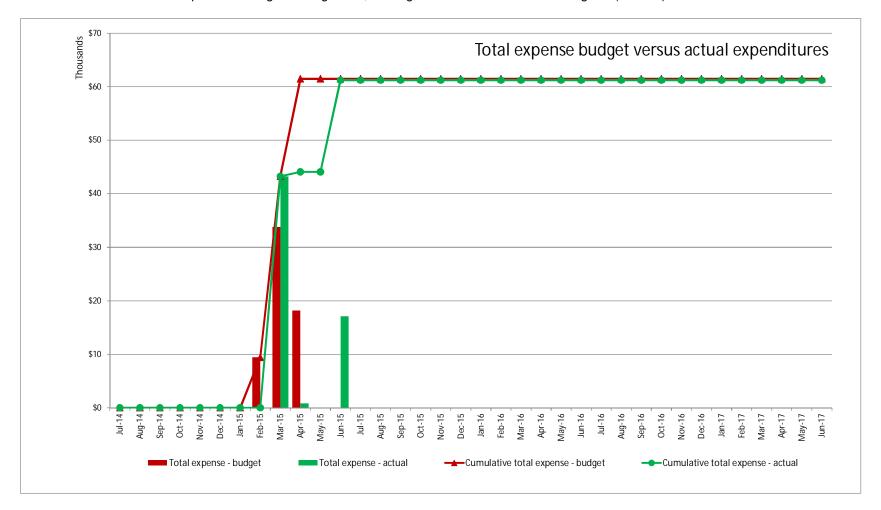


Figure 8. Total expense budget versus actual expenditures

D.4 Hardware funding

The chart below shows the hardware funding for the MM Program (Phase I).

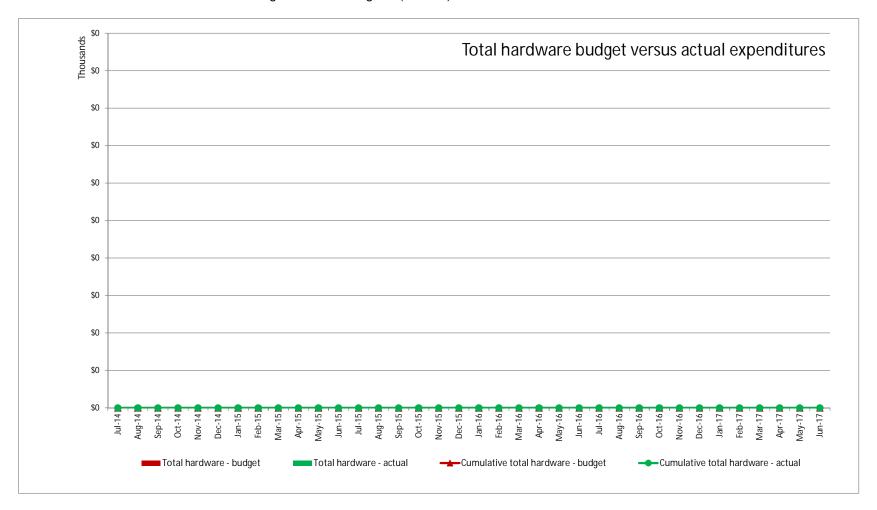


Figure 9. Total hardware budget versus actual expenditures

D.5 Other funding

The chart below shows the other funding for the MM Program (Phase I).

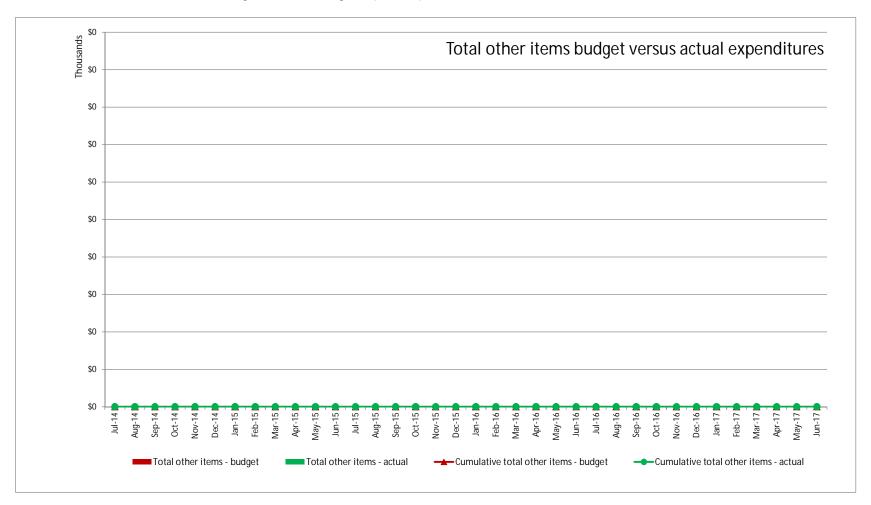


Figure 10. Total other costs budget versus actual expenditures

D.6 IV&V services funding

The chart below shows the IV&V services funding for the MM Program (Phase I).

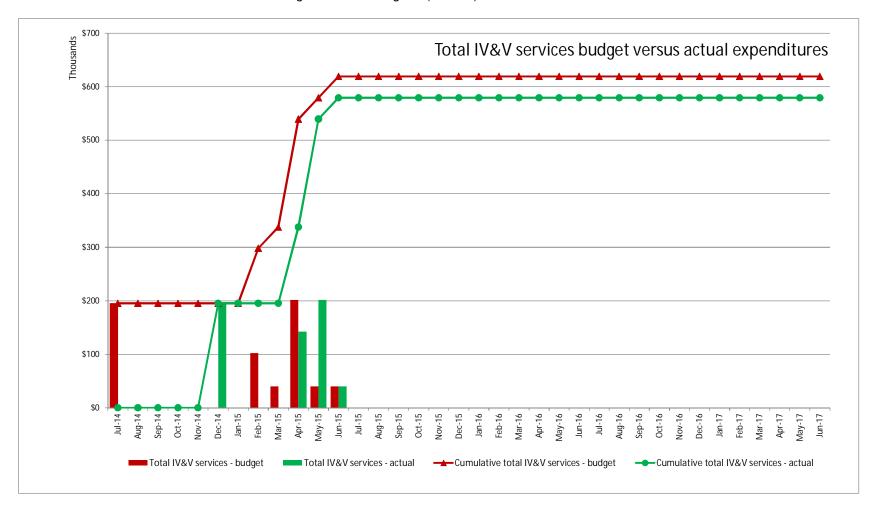


Figure 11. Total IV&V services budget versus actual expenditures

Appendix E. Maturity assessment results

This section contains the maturity scorecards for the MM Program (Phase I). The maturity rating for each area was determined as follows:

- A current maturity state was determined using the defined maturity criteria for that area in conjunction with the project assessment results.
- A recommended maturity state was determined using the defined maturity criteria in conjunction with the identified recommendations, risks and project complexity.

E.1 Maturity scorecard – program governance

The following figure shows the results of the maturity assessment for all program governance areas.

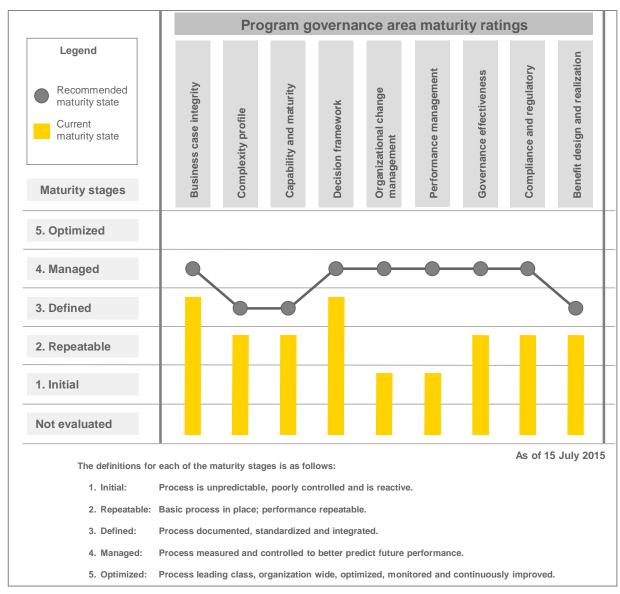


Figure 12. Maturity scorecard for program governance areas

E.2 Maturity scorecard – project management

The following figure shows the results of the maturity assessment for all project management areas.

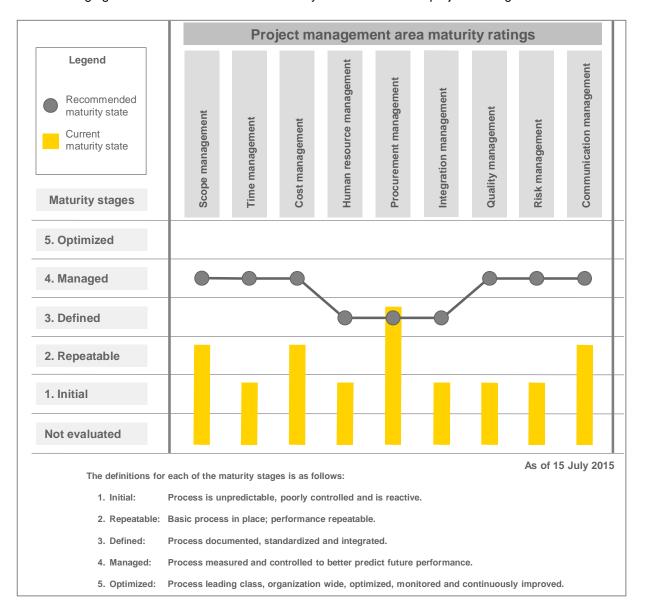


Figure 13. Maturity scorecard for project management areas

E.3 Maturity scorecard – technical solution

The following figure shows the results of the maturity assessment for all technical solution areas.

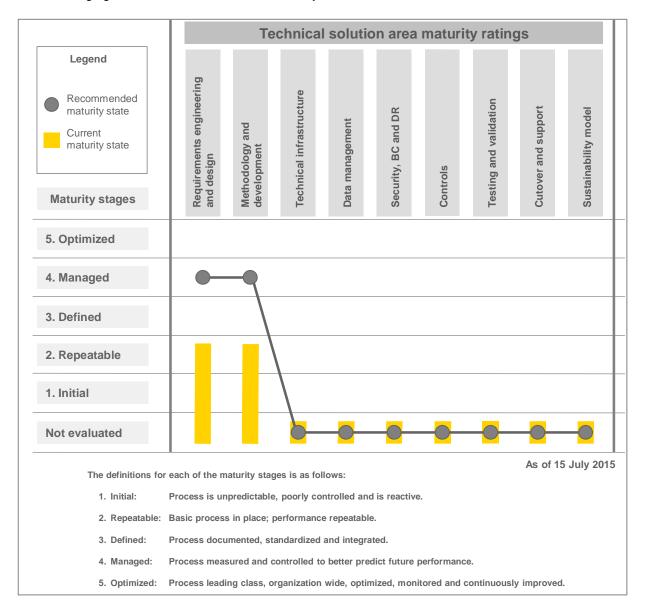


Figure 14. Maturity scorecard for technical solution areas

E.4 Maturity scorecard – maturity level definitions

Each of the maturity levels is defined in the below table.

	Table 11. Maturity level definitions
Level	Definition
1. Initial	 Processes are usually ad hoc and chaotic. The organization usually does not provide a stable environment to support the processes. Success in these organizations depends on the competence and heroics of the people in the organization and not on the use of proven processes. In spite of this chaos, organizations often produce products and services that work; however, they frequently exceed their budgets and do not meet their schedules. Organizations are characterized by a tendency to over commit, abandonment of processes in a time of crisis, and an inability to repeat their successes.
2. Repeatable	 Processes are planned and executed in accordance with policy; projects employ skilled people who have adequate resources to produce controlled outputs; involve relevant stakeholders; are monitored, controlled, and reviewed; and are evaluated for adherence to their process descriptions. The process discipline helps to ensure that existing practices are retained during times of stress. When these practices are in place, projects are performed and managed according to their documented plans.
	 Work product status and the delivery of services are visible to management at defined points (e.g., at major milestones and at the completion of major tasks). Commitments are established among relevant stakeholders and are revised as needed. Work products are appropriately controlled. The work products and services satisfy their specified process descriptions, standards, and procedures.
3. Defined	 Processes are well characterized and understood, and are described in standards, procedures, tools, and methods. The organization's set of standard processes is established and improved over time. These standard processes are used to establish consistency across the organization. Projects establish their defined processes by tailoring the organization's set of standard processes according to tailoring guidelines.
	 A critical distinction between maturity levels 2 and 3 is the scope of standards, process descriptions, and procedures. At maturity level 2, the standards, process descriptions, and procedures may be quite different in each specific instance of the process (e.g., on a particular project). At maturity level 3, the standards, process descriptions, and procedures for a project are tailored from the organization's set of standard processes to suit a particular project or organizational unit and therefore are more consistent, except for the differences allowed by the tailoring guidelines.
	 Another critical distinction is that at maturity level 3, processes are typically described more rigorously than at maturity level 2. A defined process clearly states the purpose, inputs, entry criteria, activities, roles, measures, verification steps, outputs, and exit criteria. At maturity level 3, processes are managed more proactively using an understanding of the interrelationships of the process activities and detailed measures of the process, its work products, and its services.

	Table 11. Maturity level definitions				
Level	Definition				
4. Managed	 The organization and projects establish quantitative objectives for quality and process performance and use them as criteria in managing processes. Quantitative objectives are based on the needs of the customer, end users, organization, and process implementers. Quality and process performance is understood in statistical terms and is managed throughout the life of the processes. 				
	 For selected sub-processes, detailed measures of process performance are collected and statistically analyzed. Quality and process-performance measures are incorporated into the organization's measurement repository to support fact- based decision making. Special causes of process variation are identified and, where appropriate, the sources of special causes are corrected to prevent future occurrences. 				
	 A critical distinction between maturity levels 3 and 4 is the predictability of process performance. At maturity level 4, the performance of processes is controlled using statistical and other quantitative techniques, and is quantitatively predictable. At maturity level 3, processes are typically only qualitatively predictable. 				
5. Optimized	 An organization continually improves its processes based on a quantitative understanding of the common causes of variation inherent in processes. Focuses on continually improving process performance through incremental and innovative process and technological improvements. Quantitative process improvement objectives for the organization are established, continually revised to reflect changing business objectives, and used as criteria in managing process improvement. The effects of deployed process improvements are measured and evaluated against the quantitative process improvement objectives. Both the defined processes and the organization's set of standard processes are targets of measurable improvement activities. A critical distinction between maturity levels 4 and 5 is the type of process variation addressed. At maturity level 4, the organization is concerned with addressing special causes of process variation and providing statistical predictability of the results. Although processes may produce predictable results, the results may be insufficient to achieve the established objectives. At maturity level 5, the 				
	organization is concerned with addressing common causes of process variation and changing the process (to shift the mean of the process performance or reduce the inherent process variation experienced) to improve process performance and to achieve the established quantitative process improvement objectives.				

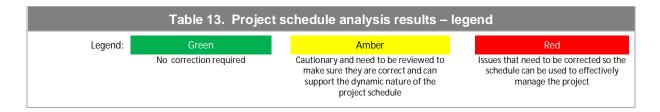
Appendix F. Project schedule analysis results

This section contains the results of conducting an analysis of all project schedules provided.

F.1 Schedule analysis

This section contains the results of the schedule analysis.

Table 12. Project schedule analysis results – schedule 1										
• MM Phase I MASTER Program Schedule v21.mpp										
Basic project task information										
Finish: 28 Jun 2019	Rema	ining:	782	days	Duration c	Duration complete: 45.0% Work complete: 32.		32.0%		
Summary: 305 Mile	stones:	8	3 No	rmal:	1,371	Total: 1	,759	Resour	ces:	96
Current: 172,354.2	Baseli	ne:	170,	850.4	Actual:	55,258.3	Remaining:		117	,095.9
Analysis Item		01 Jul 2015 to edule 30 Sep 2015		Analysis Item		Entire Schedule		01 Jul 2015 to 30 Sep 2015		
	Total	Open	Total	Open			Total	Open	Total	Open
Summary tasks:					Milestone	tasks:				
Total	305	17	20	7	Total		83	0	10	0
With predecessors	0	0	0	0	With durat	ion	0	0	0	0
With successors	0	0	0	0	With fixed	dates	13	0	0	0
With resources	0	0	0	0	Without pr	edecessor	0	0	0	0
Normal tasks:										
Total	1,371	3	94	2	With const	traints other than	138	0	6	0
Critical	62	1	0	0	Duration < 8 hours		0	0	0	0
Not started (no progress)	349	0	44	0	Duration 8 to 80 hours		893	2	49	2
Late	34	0	1	0	Duration 8	0 to 120 hours	217	0	0	0
Without predecessors	5	0	0	0	Duration 1	20 to 160 hours	155	0	35	0
Without successors	162	0	7	0	Duration >	160 hours	106	1	10	0
Without resources	1	0	0	0	Missing ba		1	0	0	0
With deadlines	0	0	0	0	Deadlines not met	or constraints	0	0	0	0
With fixed dates	138	0	6	0	With over- resources	allocated	38	0	0	0
Resources:	Resources:									
Resources	96	13	37	4	4 Peak utilization > 100% 23 3 1		10	2		
Resource assignments	6,464	15	367	10	Over-alloc	ated	5	2	5	2



F.2 Schedule analysis descriptions and risks

This section contains descriptions for the terminology and risks associated with the schedule analysis.

	Table 14. Schedule analysis descriptions and risks					
Area	ltem	Description	Risk			
Summary task	 With predecessor and successor 	Number of summary tasks with predecessors and successors	Predecessor and successor relationships should be implemented at the detail task and milestone level			
	• With resources	Number of summary tasks with resources	This has the potential to double- count resources that will then distort the utilization profile			
Milestone tasks	With duration	Number of milestone tasks with a duration not equal to zero (0)	Number of milestone tasks with a duration not equal to zero (0)			
	With fixed date	Number of milestone tasks with fixed dates	Prevents the schedule from being dynamic			
	Without predecessor	Number of milestone tasks without at least one predecessor				
Resources	With peak utilization greater than 100%	Number of resource assigned with peak utilization greater than 100%	This has the risk of a resource not being able to complete assigned work, thereby causing task (and schedule) slippage			
	With zero assigned work	Number of resource listed in the resource sheet with no work assigned	Any resource with zero (0) assigned work should be removed from the schedule			
	Over- allocated	Number of resources assigned to tasks that are over-allocated	This has the risk of a resource not being able to complete assigned work, thereby causing task (and schedule) slippage			
Normal tasks	• Late	Number of late tasks	A task is automatically designated as "late" if it is not complete and the project status date is later than the baseline finish date			

	Table 14. Schedule analysis descriptions and risks					
Area	ltem	Description	Risk			
Normal tasks	With predecessor and successor	Number of tasks without predecessors or successors	This prevents the project schedule from being dynamic and automatically computing start and finish dates based on the task durations and linkages			
	Without resources	Number of tasks without resources	All tasks must have associated work and assigned resource(s) to complete the work so the total level of effort (LOE) and staffing profile can be determined			
	• With deadlines	Number of tasks with deadlines (deadline for the task is set to other than "NA")	This prevents the project schedule from being dynamic and automatically computing start and finish dates based on the took durations and linkages.			
	With fixed dates	Number of tasks with fixed dates (constraint date for the task is set to other than "NA")	the task durations and linkages			
	With constraints other than ASAP	Number of tasks with constraint other than "as soon as possible (ASAP)"				
	With duration less than 8 hours	Number of tasks with duration less than 8 hours	Tasks with duration of less than 8 hours should generally be combined with other tasks, if possible, to avoid too much detail			
	• With duration 8 to 80 hours	Number of tasks with duration greater than or equal to 8 hours and less than or equal to 80 hours	This allows the reporting of start and finish of a task within two weekly update cycles, allowing focus on performance and corrective action if needed			
	• With duration 80 to 120 hours	Number of tasks with duration greater than 80 hours and less than or equal to 120 hours	These tasks may have too much uncertainty and should be broken down into smaller duration tasks			
	• With duration 120 to 160 hours	Number of tasks with duration greater than 120 hours and less than or equal to 160 hours				
	With duration greater than 160 hours	Number of tasks with duration greater than 160 hours				

	Table 14. Schedule analysis descriptions and risks					
Area	ltem	Description	Risk			
Normal tasks	Missing baseline information	Number of tasks that are missing baseline information	 Task satisfies one or more of the following: Baseline start equals "NA", Baseline finish equals "NA", Duration equals 0, or Work equals 0 			
	Deadlines or constraints not met	Number of tasks that do not satisfy defined deadlines or constraints	 Task satisfies one or more of the following: Deadline does not equal "NA" and total slack is less than 0, or Constraint date does not equal "NA" and total slack is less than 0 			
	With over- allocated resources	Number of tasks with resources assigned that are over-allocated	This has the risk of a resource not being able to complete assigned work, thereby causing task (and schedule) slippage			

F.3 Performance analysis

This section contains the results of the performance report analysis.

Table 15. Performance report analysis results					
Title / file name	Performance report				
Report end date	Date				
		Performance	e information		
Earned value (EV)		xxx,xxx hours	Value of the work performed		
Planned value (PV)		xxx,xxx hours	Work scheduled to be accord	nplished	
Actual cost (AC)		xxx,xxx hours	Total cost actually incurred		
Budget at completion (BA	(C)	xxx,xxx hours	Total planned work for the p	roject	
Estimate to complete (ETC	C)	xxx,xxx hours	Estimated work to complete	project	
Estimate at completion (E	AC)	xxx,xxx hours	Total project cost (AC + ETC	<u>;</u>)	
Schedule variance (SV)		xxx,xxx hours	Difference between EV and PV (SV = EV – PV)		
Cost variance (CV)		xxx,xxx hours	Difference between EV and AC (CV = EV – AC)		
To complete performance (TCPI)	index	x.xx	Indicates the future required cost efficiency needed to achieve the target BAC		
Schedule performance inc	dex (SPI)	x.xx	A measure of schedule effici	ency (SPI = EV / PV)	
Cost performance index (CPI)	X.XX	A measure of cost efficiency	(CPI = EV / AC)	
		Schedule p	erformance		
On schedule	Ahead	l of schedule	Behind schedule	Overall trend	
EV = PV, SPI = 1.0	EV >	PV, SPI > 1.0	EV < PV, SPI < 1.0	Neutral	
Cost performance					
On cost	Under cost		Over cost	Overall trend	
EV = AC, CPI = 1.0	EV >	AC, CPI > 1.0	EV < AC, CPI < 1.0	Neutral	
	Comments				
The MM Program Team has not begun reporting EVM metrics.					

The following figure shows the overall cost and schedule performance and associated trends. The data in this figure is derived from the project performance reports created by the PMO that is used to populate Table 15 above.

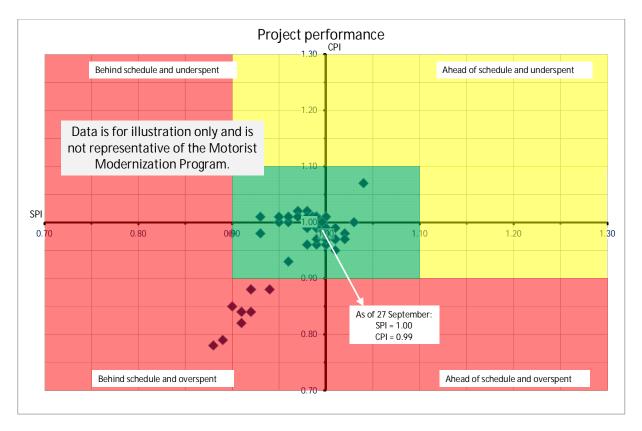


Figure 15. Overall cost and schedule performance

Key items displayed in the above figure are as follows:

- The MM Program Team has not begun reporting EVM metrics.
- Data displayed in the above figure is for illustration only and is not representative of the MM Program (Phase I).

The following figure shows the overall trends for PV and EV. The data in this figure is derived from the project performance reports created by the PMO that is used to populate Table 15 above.

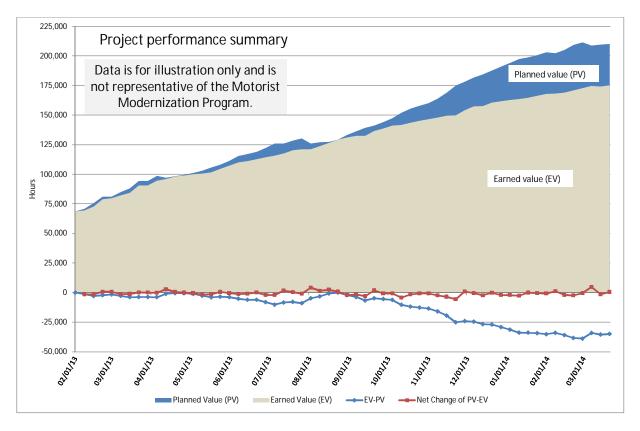


Figure 16. Project performance summary

Key items displayed in the above figure are as follows:

- The MM Program Team has not begun reporting EVM metrics.
- Data displayed in the above figure is for illustration only and is not representative of the MM Program (Phase I).

Appendix G. Interviews and artifacts

This section contains the list of people interviewed and artifacts collected as part of the monthly assessment.

G.1 Interviews

The below table identifies interviews conducted during the monthly reporting period.

Table 16. Interviews conducted				
Individual	Title / responsibility	Group	Date	
None	No interviews conducted since the last report.			

G.2 Artifacts

The below table identifies artifacts received and reviewed during the monthly reporting period.

Table 17. Project artifacts				
Category	Documents			
Deliverables	 4d – May legislative status report 4e – June legislative status report 11 – New system requirements tracking report 12 – Requirements report 19 – Data warehouse gap analysis report 			
Decision escalation framework	DRAFT Motorist Mod Decision Escalation.xlsx			
ESC charter	DHSMV Motorist Modernization ESC Charter 07062015.docx			
ESC meeting – 07 July 2015	ESC Meeting Agenda 07072015.docx			
IV&V deficiency action plan	 HSMV Action Plan for Addressing IVV Deficiencies 06172015b.xlsx HSMV Action Plan for Addressing IVV Deficiencies 06242015.xlsx HSMV Action Plan for Addressing IVV Deficiencies 07012015.xlsx HSMV Action Plan for Addressing IVV Deficiencies 07082015.xlsx 			
Meeting minutes	Meeting Minutes - 20150512.docx			
MM PMP	MM PMPv2.0_DRAFT.docx			
Schedule	MM Phase I MASTER Program Schedule v21.mpp			
Status report	 DL Issuance-06172015.pdf DL Issuance-06242015.pdf DL Issuance-07012015.pdf DL Issuance-07082015.pdf Support Services-06242015.pdf Support Services-07012015.pdf Support Services-07082015.pdf Support Services-07082015.pdf 			
Spending plan	MM Phase I - Spend Plan and Summary - 2015-06-25.xlsx			

Appendix H. Meeting minutes and status reports

This section contains a summary of the meetings conducted and status reports submitted during the monthly reporting period.

H.1 Meetings

The below table lists the meetings attended during the monthly reporting period.

Table 18. Summary of meetings				
Date	Description	Reference		
	Accenture weekly status	• none		
17 June 2015	IV&V weekly status	DHSMV IVV-202AS Weekly Status Meeting v1.0 Draft - 20150617.docx		
	Deficiency meeting	• none		
	Deliverable 19 review	• none		
18 June 2015	Deliverable 19 review	• none		
	Accenture weekly status	• none		
24 June 2015	IV&V weekly status	DHSMV IVV-202AT Weekly Status Meeting v1.0 Draft - 20150624.docx		
	Accenture weekly status	• none		
01 July 2015	IV&V weekly status	DHSMV IVV-202AU Weekly Status Meeting v1.0 Draft - 20150701.docx		
02 July 2015	Future Accenture deliverables	• none		
07 July 2015	ESC meeting	• none		
	Accenture weekly status	• none		
08 July 2015	Phase I schedule review	• none		
00 daily 2010	IV&V weekly status	DHSMV IVV-202AV Weekly Status Meeting v1.0 Draft - 20150708.docx		

In addition to the meetings identified in the above table, there were informal conversations regarding individual topics and areas.

H.2 Status reports

The below table lists the IV&V status reports submitted during the monthly reporting period.

Table 19. Summary of status reports				
Date	Description	Reference		
17 June 2015	IV&V status report	DHSMV IVV-201AS Status Report v1.0 Draft - 20150617.docx		
24 June 2015	IV&V status report	DHSMV IVV-201AT Status Report v1.0 Draft - 20150624.docx		
01 July 2015	IV&V status report	DHSMV IVV-201AU Status Report v1.0 Draft - 20150701.docx		
08 July 2015	IV&V status report	DHSMV IVV-201AV Status Report v1.0 Draft - 20150708.docx		

EY | Assurance | Tax | Transactions | Advisory

About EY

EY is a global leader in assurance, tax, transaction and advisory services. The insights and quality services we deliver help build trust and confidence in the capital markets and in economies the world over. We develop outstanding leaders who team to deliver on our promises to all of our stakeholders. In so doing, we play a critical role in building a better working world for our people, for our clients and for our communities.

EY refers to the global organization, and may refer to one or more, of the member firms of Ernst & Young Global Limited, each of which is a separate legal entity. Ernst & Young Global Limited, a UK company limited by guarantee, does not provide services to clients. For more information about our organization, please visit ey.com.

Ernst & Young LLP is a client-serving member firm of Ernst & Young Global Limited operating in the US.

© 2015 Ernst & Young LLP. All Rights Reserved. 1501-1376490

www.ey.com © 2015 Ernst & Young LLP. All Rights Reserved.

1003-1137869